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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,758	04/19/2001	James D. Greenfield	END920000125US1(00240084A	1311

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EXAMINER	
DASTOURI, MEHRDAD	
ART UNIT	**PAPER NUMBER**
2623	6

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/838,758	GREENFIELD ET AL.	
	Examiner	Art Unit	
	Mehrdad Dastouri	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-12 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-12 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on July 9, 2001 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 1 and 2 are objected to because of the following informalities:

Figures 1 and 2 should be labeled "prior art" in lieu of "related art".

Appropriate correction is required.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration (submitted in two pages) is defective because:

The clause regarding "willful false statements ..." required by 37 CFR 1.68 has been omitted. Furthermore, the last paragraph in Page 1 is not complete.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheng et al (U.S. 6,631,206).

Regarding Claim 1, Cheng et al disclose a method of pre-processing image data, said method including steps of:

applying luminance and chrominance data of consecutively presented lines of data to respective data inputs of a filter (Column 2, Lines 41-56; Figures 3-6; Figure 10, Step 128; Column 9, Lines 1-13), and

applying hybrid filter coefficients to said filter to concurrently obtain spatially filtered and chrominance converted data (Column 2, Lines 41-56; Figures 3-6; Figure 10, Step 128; Column 9, Lines 1-13; Column 11, Lines 50-67, Column 12, Lines 1-18).

With regards to Claim 7, arguments analogous to those presented for Claim 1 are applicable to Claim 7.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2-4, 6 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al (U.S. 6,631,206) in view of Mancuso et al (6,285,801).

Regarding Claim 2, Cheng et al do not explicitly disclose a method as recited in Claim 1, wherein said consecutively presented lines are lines of a progressive scan format. However, it is well known that conventional scanning will generate consecutive lines of progressive scan format as disclosed by Mancuso et al (Figure 6; Column 5, Lines 58-67, Column 6, Lines 1-45).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Cheng et al invention according to the teachings of Mancuso et al to apply consecutive lines of data to the filter as lines of a progressive format because it is a well known procedure routinely implemented in the art to reduce processing time.

Regarding Claim 3, Mancuso et al further disclose the preprocessing method wherein said consecutively presented lines are lines of an odd field or an even field of an interlaced scan format (Figure 6, components 604 and 608; Column 5, Lines 58-67, Column 6, Lines 1-45).

Regarding Claim 4, Mancuso et al further disclose the preprocessing method further including a step of altering said hybrid filter coefficients for respective ones of said odd field and said even field (Figure 7; Column 8, Lines 34-53).

Regarding Claim 6, Mancuso et al further disclose the preprocessing method further including the further steps of multiplying said luminance and chrominance data by said hybrid filter coefficients for respective ones of said consecutively presented lines to produce weighted luminance and chrominance values (Figure 7; Column 8, Lines 54-67, Column 9, Lines 1-6), and

summing said weighted luminance and chrominance values (Figure 7; Column 8, Lines 54-67, Column 9, Lines 1-6).

With regards to Claims 8 and 9, arguments analogous to those presented for Claim 2 are applicable to Claims 8 and 9.

With regards to Claim 10, arguments analogous to those presented for Claim 3 are applicable to Claim 10.

With regards to Claim 11, arguments analogous to those presented for Claim 4 are applicable to Claim 11.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al (U.S. 6,631,206).

Regarding Claim 5, Cheng et al do not explicitly disclose a method as recited in Claim 1, further including a step of removing alternate lines of said chrominance converted data.

However, removing alternate lines of chrominance converted data is a standard procedure in image processing (Official Notice).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Cheng et al invention to remove alternate lines of chrominance converted data because it is a well known methodology routinely implemented in image processing for reducing the amount of data to be processed.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al (U.S. 6,631,206) in view of Ozaki et al (U.S. 4,903,122).

Regarding Claim 12, Cheng et al do not explicitly disclose a method as recited in Claim 7, further including means for sub-sampling said chrominance converted data.

Ozaki et al disclose a color imaging system including means for sub-sampling said chrominance converted data (Figure 8a; Column 6, Lines 65-68, Column 7, Lines 1-21).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Cheng et al invention according to the teachings of Ozaki et al to include means for sub-sampling said chrominance converted data because it is a well known procedure routinely implemented in the art to reduce the amount of data to be processed.

Other prior art cited

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,773,814 to Phillips et al.

U.S. Patent 6,226,401 to Yamafuji et al.

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehrdad Dastouri whose telephone number is (703) 305-2438. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MEHRDAD DASTOURI
PRIMARY EXAMINER

Mehrdad Dastouri
Primary Examiner
Art Unit 2623
May 3, 2004